## Supplemental Table 1. Multiplex assay sensitivity in detection of multiple agents

3 agents present		4 agents present		5 agents present	
Agent	Sensitivity (copies)	Agent	Sensitivity (copies)	Agent	Sensitivity (copies)
A. phagocytophilum B. microti B. burgdorferi B. miyamotoi Powassan virus	10 10 10 10 10	A. phagocytophilum B. microti B. burgdorferi B. miyamotoi Powassan virus	10 10 10 10 10	A. phagocytophilum B. microti B. burgdorferi B. miyamotoi Powassan virus	10 10 10 10 20

In assays with 3 and 4 standards, different combinations of agents were tested with equal sensitivity results.

Concentrations tested included 10, 20, 50, 100 and 1000 copies present at equal concentration for each agent.